

## Claims:

1. A heat-resistant polyester container wherein the temperature T is not lower than 120°C at a moment when the coefficient of contraction in the barrel portion of the polyester container represented by the following formula is 0.66%,

$$\text{Ratio of contraction (\%)} = (\text{amount of contraction} / \text{gauge length}) \times 100 \quad \text{--- (1)}$$

- wherein the amount of contraction is measured from a test piece cut from the barrel portion of the polyester container so as to possess a gauge length of 20 mm in compliance with TMA without pre-loading while elevating the temperature at a rate of 3°C /min. after 30°C is exceeded.

2. A heat-resistant polyester container according to claim 1, wherein the polyester container has reduced pressure-absorbing panels in the barrel portion, and the coefficient of contraction and the temperature T are values at pole portions among the reduced pressure-absorbing panels.

3. A method of producing a heat-resistant polyester container by biaxially draw-blow-molding a preform of a polyester resin by using a primary metal mold to obtain a primary intermediate molded article, contracting the primary intermediate molded article by heating to obtain a secondary intermediate molded article, and biaxially draw-blow-molding and heat-setting the secondary intermediate molded article by using a secondary metal mold heated at 150 to 210°C, so that the thickness reduction ratio of the barrel portion expressed by the following formula (2) is not smaller than 5%,

$$\text{Thickness reduction ratio (\%)} = \{(t_1 - t_2) / t_2\} \times 100 \quad \text{--- (2)}$$

wherein  $t_1$  is a thickness of the barrel portion of the secondary intermediate molded article, and  $t_2$  is a thickness of the barrel portion of the polyester container which is the molded article.

- 5        4. A method of producing a heat-resistant — polyester container according to claim 3, wherein the polyester container has reduced pressure-absorbing panels in the barrel portion, and the thickness reduction ratio is a value in the pole portions among  
10       the reduced pressure-absorbing panels formed in the barrel portion.

15

20

25

30

35